Section V

Conservation Treatment Effects

Effects for RMS Formulation

Section V contains summaries of effects data relevant to the field office area and information for decisionmakers evaluating Resource Management Systems (RMS) developed and inserted in Section III. The display should be cross referenced with cropping system, soil map units and other descriptions of the resource setting and conditions (e.g., precipitation, slope, etc.) that the RMS was formulated to address in that field office. The format of the display should be easily understandable so as to make the information valuable as ready reference material for planning and decisionmaking. The display will show the degree of resource protection achieved.

Collection of data on conservation effects is a long-term effort to be undertaken as part of the follow-up element in the planning process. Initial efforts may provide effect information for only the most common situations. Over time, additional resource situations and treatment alternatives will be examined to add depth and breath to the available conservation effect information.

Information on conservation effects may be refined or updated over time as needed in the local area. The data on conservation effects should be useful to field office personnel in identifying suitable conservation treatment applicable to the area, and serves as technical reference materials when working with decisionmakers in the conservation planning process.

The tools contained in this guide will help develop resource management

systems, if needed, and assist the planning process. These technical materials will help evaluate the effect of applying resource management systems on the identified and predictable problems affecting the soil, water, air, plant and animal resources dealt with in conservation planning. They are also excellent training tools for establishing a "pattern of thinking" for developing effective RMSs in conservation planning assistance with individuals in real world situations. When making planning recommendations, the conservationist must be reasonably certain that the identified and predictable resource problems are treated without creating new problems in one ore more of the other resources. RMS options formulated must meet established quality criteria. This guide provides the process and working tools for consistently achieving adequate treatment of the resources.

Two worksheets, the Site Specific Practice Effects Worksheet and the Resource Management System Options Worksheet, use data found in the CPPE to aid the planning process. They both are filed with the Guidance Documents in Section III of the FOTG. These documents also provide the information used in the CED process.

Site Specific Practice Effects Worksheet

This worksheet uses the practices in the CPPE to develop the most applicable conservation practices to address site specific identified or predictable resource problems while considering land user objectives. It displays effects for only the identified resource problems

that exist, are predicted on the planning area, or have influence offsite. This array of practices lends itself to a quick comparison of the relative value of each practice including both positive and negative effects on the resource problems identified.

Resource Management System Options Worksheet

Conservation practices that have the potential to solve the resource problems that were listed on the Site Specific Practice Effects Worksheet are now grouped in combinations and placed on the RMS Options Worksheet to address the identified site specific problems. The different combinations of practices became RMS options when the quality criteria have been achieved for all the identified and predictable resource problems.

Each RMS conservation plan will reference either a RMS Guidesheet or a Resource Management System Options Worksheet. Because guidesheets may not exactly match the planning unit, guidesheets may be edited to document site specific situations. Documenting conservation effects is required when providing technical assistance to landusers.

After the RMS options have been developed the Conservation Effects for Decisionmaking process may be followed if the land user needs additional information to reach a decision. Together, these technical tools provide a powerful technique to plan, evaluate and select RMSs.

Note: See Section III RMS Guidesheets for current SSPEW and RMSOW evaluations using CPPE data.

Conservation Effects for Decisionmaking

Conservation effect information is collected and documented so the planner can provide information to the landuser so they can make an informed decision. The planner can organize effect information using the Conservation Effects for Decisionmaking (CED) framework. This framework encourages the conservationist to draw two pictures of the world: 1) A benchmark condition without conservation; and 2) the conditions that would be expected with conservation treatment. The scenarios are then used to identify the changes between the two conditions. By displaying both the advantages and the disadvantages, the conservationist can show what the conservation treatment means from the landowner's perspective.

To be most useful, the effects information used in CED and contained in Section V must be factual, realistic, and practical. It may come from the planner's personal experience, from research and field trials, or (preferably) from case studies of conservation applied on local farms.

CED is a process that helps landusers understand the effects of resource management systems on their own operation. The process helps the planner display the impacts of conservation options when compared to some benchmark condition. The "benchmark" is normally the current conditions as they exist on the decisionmaker's land.

Impacts may be rated by the decisionmaker as beneficial or adverse depending on his or her values. The amount of information given to the producer should be that amount that is enough to help him or her make a

decision. Information will generally be provided as needed in a stepwise, hierarchical fashion with each step offering more detail, complexity or quantification until a point is reached where the decision maker receives sufficient information to make a informed decision.

Central to collecting information to use in the CED process is follow-up and documentation of effects. What the conservation planner discovers during follow up will add to NRCS's experiences and knowledge base and should be put back into the CED process and Section V. Effects are to be recorded for each of the natural resources and other items relating to the decisionmaker's farm operations.

On way to assemble needed effect information is through the use of case studies. Case study information is recorded during the planning process and verified during follow up. Information from case studies should be shared between field offices to the extent possible and placed in Section V-B. This collection and improvement process will be a continuing activity that

will gradually add to the total quality of Section V and the conservation plans that result from its use.

Implementation of CED will be assisted through the use of information displays regarding conservation options and through worksheets used to record the current "benchmark" conditions. A display of the conservation treatment option information should be prepared for each of the common or dominant resource situations and cropping sequences prevalent in a field office. The information assembled to document the effects of conservation options is compared to information regarding the decisionmaker's current of benchmark condition. Such information is captured during the planning process. The difference between the benchmark condition and a treatment option is the impact of installing that option and should serve as the basis for making a decision to install or reject an option.

Note: File Conservation Effects for Decisionmaking examples following this section. Refer to FOTG Section III for RMS Guidesheets used in developing CED examples.

Conservation Effects for Decisionmaking

